

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WOLFGANG HENSELER,
MANFRED MULLER, EGON KATZ,
GUIDO WETZEL AND LUIGI BRAMBILLA

Appeal No. 95-2124
Application 08/076,789¹

HEARD: MARCH 3, 1998

Before COHEN, PATE and NASE, **Administrative Patent Judges**.

PATE, **Administrative Patent Judge**.

DECISION ON APPEAL

This is an appeal from the examiner's refusal to allow claims 3 and 5, the only remaining claims in the application.

The claimed invention is directed to an automotive airbag which is encased in a central region by a synthetic film casing. The casing is composed of a tough, plastically deformably

¹ Application for patent filed June 15, 1993.

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synthetic film material which when subjected to forces from the expanding airbag initially stretches, providing a growing resistance to the expansion of the airbag. Subsequently, the film is in an over-stretched condition and provides a slowly declining resistance to expansion of the airbag. Lastly, the film ruptures to allow the airbag to expand to its greatest extent. Claim 5 reproduced below, is further illustrative of the claimed subject matter.

5. Collision protection system for passengers of motor vehicles comprising:

an airbag which is accommodated in a folded up storage condition in a vehicle-side receptacle and which is automatically expanded by an assigned gas generator in an event of an accident to form an airbag cushion protecting a passenger, and

a casing at least partially enclosing the airbag in its folded up storage condition, said casing serving to delay and control the expansion of the airbag,

wherein said casing is composed of a tough plastically deformable synthetic film material which, when subjected to forces from the expanding airbag, initially stretches and provides growing resistance to initial expansion of the airbag, secondly stretches further in an overstretching phase and provides slowly declining resistance to further expansion of the airbag, and lastly provides release of resistance to expansion of the airbag upon bursting of the film material.

The references of record relied upon as evidence of obviousness are:

Bishop et al. (Bishop)	4,964,654	Oct. 23, 1990
Miller et al. (Miller)	5,004,226	Apr. 2, 1991

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Rather than reiterate the arguments of the appellants and the examiner, reference is made to the brief, reply brief, the examiner's answer and supplemental answer for the full details thereof.

OPINION

We have carefully reviewed the rejection on appeal in light of the arguments of the appellants and the examiner. As a result of this review, we have reached the determination that the applied prior art does not establish a *prima facie* case of obviousness with respect to the subject matter of the claims on appeal. Therefore, the rejections of the claims on appeal are reversed. Our reasoning follows.

The examiner has rejected claim 5 under 35 U.S.C. § 103 as unpatentable over Bishop.

We are in agreement with the examiner that Bishop discloses a casing **56** covering the airbag which is stored in a folded condition. The following is Bishop's disclosure with respect to the casing **56**:

The material (sack, band, etc.) **56** is chosen of a material having a tensile strength sufficient to maintain the bag **32** in its predeployment condition. The strength of the material **56** is such that during initial deployment thereof, the deployment forces are sufficient to rupture it thereby permitting

the bag **32** to expand with negligible restriction. The material used may be a plastic film, cloth or spun bonded olefin material such as that manufactured under the name of TYVEK manufactured by DuPont. **FIG. 4b** schematically illustrates a front view of the sub assembly **58** and in particular the band or sack **56**. To enhance deployment of the air bag **32**, the material **56** may include a pre-weakened area such as a tear seam, heat stress area or line of perforations all generally designated by numeral **60**. (Bishop, column 4, lines 47-61).

As can readily be seen by the quoted portion, we do not agree with the examiner's finding of fact that Bishop discloses a "soft plastic film," nor the examiner's finding that such a film will be plastically deformable. It is clear from the disclosure of Bishop that the material **56** is to afford negligible restriction to the expanding airbag. Bishop further discloses that the material **56** may be pre-weakened to afford this negligible restriction. Therefore, it is our finding that the covering material **56** of Bishop provides no material restriction to the airbag expansion, nor would it have been obvious to provide any material restriction to an airbag expansion from the teaching of Bishop.

The appellants and the examiner both discuss an inherency argument respecting whether Bishop would inherently "behave as claimed." Our finding that Bishop affords only negligible

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restriction to Bishop's expanding airbag negates any proper inherency argument based on Bishop.

The examiner has rejected dependent claim 3 under 35 U.S.C. § 103 as unpatentable over Bishop in view of Miller. Miller discloses an airbag occupant restraint system wherein the bag is maintained in a folded position by a band of steel. The band of steel is generally in an hourglass shape so that the airbag is allowed to expand laterally at the 3 and 9 o'clock peripheral positions before the central portion of the airbag is allowed to expand. Here again, as in Bishop, there is no disclosure of the steel band plastically deforming and meeting the three stages of appellants' claimed airbag expansion as recited in parent claim 5. The disclosure in Miller is that the steel band ruptures at its juncture **86** when the pressure in the bag reaches a predetermined limit such as **25** psi. Therefore, the disclosure of Bishop does not make up for the shortcomings of the disclosure in Miller in that neither reference discloses the plastic deformation required by appellants' claim 5. Therefore, the references Miller and Bishop and the combined teachings thereof do not establish a *prima facie* case with respect to the subject matter of either claim 5 or claim 3.

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Therefore, the rejections are reversed.

REVERSED

Irwin Charles Cohen)	
Administrative Patent Judge)	
)	
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William F. Pate, III)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
Jeffrey V. Nase)	
Administrative Patent Judge)	

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